

subfamilies, according to the manner in which they moult their tail-feathers. According to this system, *Ithagenes* would obtain a place amongst the Perdiciinæ or true Partridges. In habits it would, however, appear to come very close to the Tetraonidæ, and the eggs of *I. geoffroyi* and *I. kuseri*, which appear to be the only ones known at present, are exactly like weakly marked eggs of the Grey Hen.

VI.—*A Few Notes on Tetrao urogallus and its Allies.*

By COLLINGWOOD INGRAM, M.B.O.U.

WHEN working at my Pyrenean specimens of Capercaille, I found it necessary to go rather more deeply into the study of this group of birds than I had at first intended, and in the course of my investigations I have been forced to examine a large number of examples. The opinions expressed below are principally based on the fine series contained in the Tring and British Museums and the mounted specimens in the Marmottan collection now preserved in the Muséum d'Histoire Naturelle of Paris.

Although at first sight the Capercaille appears to be a somewhat variable species, not only in dimensions, size of bill, &c. (which depend partly upon the age of the individual), but also in the plumage of the female, it will be found that these differences have their limitations within certain geographical areas, and when a greater mass of material is brought together and the whole group carefully reviewed, a number of fairly well-defined local races will no doubt be distinguishable.

Brehm, of course, recognised several forms of this bird, and three of these he maintained, in his 'Vogelfang' (p. 87)\*, viz.: (1) the typical *Tetrao urogallus* of Linnæus, ranging from central Germany northwards; (2) *Tetrao major* (which he describes as a larger bird with a thicker bill), also

\* In the present paper I have intentionally avoided all reference to obvious hybrids or aberrations.

inhabiting central Germany ; and, finally, (3) *Tetrao crassirostris* (which he declares is almost as large as *T. major*, with a thick and strong bill and a very long tail), inhabiting Carinthia and, probably, the Tyrol and Switzerland.

As a matter of fact neither of the last two-mentioned forms appears to be valid. I have, at any rate, no hesitation in uniting *T. major* with *T. urogallus*\*, while, should further research prove *T. crassirostris* to be really distinct, it is certain that the characters enumerated above will not serve to distinguish it. Unfortunately we have very little material from the mountains of central Europe to judge from, and so far, I have only been able to examine a single male from Switzerland and a second from the Italian Alps. Neither of these agrees in the least with Brehm's description of *T. crassirostris*, unless, perhaps, it be in the rather long tail of the Swiss bird (Pilatus 14.4.06, in the Tring Museum).

In Scotland the Capercaillie was re-introduced from Sweden at the comparatively recent date of 1837, so it is scarcely surprising to find that specimens from that country are still indistinguishable from the typical Scandinavian bird. It is only fair to add, however, that fully-grown examples of the latter sometimes attain slightly larger dimensions and are often heavier birds †.

From the eastern portions of its range continental naturalists profess to recognise at least three races of the Capercaillie. Of these the bird inhabiting the Ural Mountains is at once the most beautiful and distinct. The male of this form is much paler and greyer than that of the typical bird, and a large part of its plumage is of a clear grey colour, finely pencilled with blackish. The wing-coverts and scapulars are light rusty-brown instead of the deep mahogany

\* It is perhaps true that *T. urogallus* attains its maximum size in Germany, western Russia, and south Scandinavia, but measurements prove that this superiority is neither constant nor well-marked.

† Millais (Nat. Hist. of Brit. Game Birds, pp. 1 and 3) states that the weight of an adult male from Scotland ranges between 9 and 12 lbs. He has known Russian examples to turn the scales at 14 lbs., while south Swedish birds have been recorded up to 16 and 17 lbs.

in *T. u. urogallus* ; while, finally, there is very little black on the under parts, and white largely predominates on the belly. The female is also conspicuously paler in coloration, and has relatively few black barrings on the under parts, which are profusely marked with white. The secondaries and scapulars are likewise distinctly spotted with white.

Of this handsome bird, *T. u. uralensis* Nazarow\*, there is happily no lack of specimens both in the Tring and British Museums, and there can be no question as to its sub-specific distinctness. But what about Meyer's *T. u. taczanowskii* † from south-west Siberia, and Buturlin's *T. u. volgensis* ‡ from south-east Russia? I have failed to find an ample description of the former, but as Buturlin says it differs only from his *T. u. volgensis* by having a greater amount of white on the outer edge of the primaries and a larger bill, it is safe to assume that the two birds are very similar in coloration. Unfortunately, topo-typical specimens of these races do not appear to exist in England, and it is therefore impossible to express any definite opinion upon them. There are, however, four very interesting Siberian specimens in the British Museum which throw some light upon the subject. These were collected by Seeböhm in lat. 66°5' N. during his visit to the valley of the Yenesei in the summer of 1877. The two males from this district agree closely with Buturlin's description of his *T. u. volgensis*, and as this, in turn, is stated to resemble *T. u. taczanowskii*, it seems highly probable that the whole of western Siberia is inhabited by the same bird, viz. *T. u. taczanowskii*. Judging by the Yenesei specimens, this form might be described as intermediate between the typical *T. u. urogallus* and *T. u. uralensis*, for while it does not appear to be quite so dark as the former, it is certainly not so pale, nor is it so grey as the latter. The following is a brief description of the British

\* Bull. Soc. Imp. Nat. Mosc. lxii. 1887, p. 365.

† Meyer, 'Unser Auer-, Rackel- und Birkwild,' Wien, 1887, p. 10.

‡ Buturlin, Orn. Monatsb. 1907, p. 81. In this paper Buturlin attributes the authorship of *T. u. taczanowskii* to Stejneger, but I think this must be an error.

Museum specimens. The males are generally paler than *T. u. urogallus*, and the grey vermiculations cover a larger area of the whole plumage and extend further down the tail. The brownish portions of the upper surface are lighter and of a more rusty-tawny colour. The females are also inclined to be pale, and in one example, especially, the plumage is generously marked with white. The feet and legs are heavily feathered.

The characters assigned to *T. u. volgensis* do not appear to me to satisfactorily differentiate it from the above form. It must be pointed out, however, that the habitat of *T. u. uralensis* lies between that of *T. u. taczanowskii* and *T. u. volgensis*. Under these circumstances, therefore, and without any evidence to the contrary, we are bound to acknowledge Buturlin's south-Russian form.

We must now turn our attention to the western portions of the Capercaillie's range. Here we find a considerable gap in the distribution of the species, and at the present day practically the whole of France separates the Pyrenean from the Alpine birds. This complete isolation is apparently only of recent date, for we have proof that the Capercaillie formerly inhabited the higher pine-clad peaks of the Auvergne mountains\*. Although it still exists in the Pyrenees, it has now become so rare in these mountains that there is every reason to fear its ultimate extinction. As a consequence, one very seldom has the opportunity of handling a Capercaillie from this locality. I may, therefore, consider myself fortunate in having been in the position to examine no fewer than eleven examples from various portions of this range. All of these agree in being remarkably small birds, while the females are generally rather dark in coloration and are

\* Magaud d'Aubusson (Bull. Soc. Nat. d'Acclim. France, 1897, p. 278) says that the last Capercaillie was killed in the Auvergne more than half a century ago. "At the end of the eighteenth and perhaps still at the commencement of the nineteenth century, it was found not only in the mountains of Cantal, but also in the lower Auvergne, near Olliergues, in the Menat and Mont Dorés woods, and in the mountains round the town of Ambert. It was known in this province by the name of 'Faisant bryant,' and it was formerly common."

very distinctly barred on the under surface. Having carefully considered the question, I am of the opinion that these characters are sufficiently pronounced to warrant the bird's recognition as a new sub-species. I therefore propose to name it:—

*Tetrao urogallus aquitanicus*, subsp. n.

*Habitat.* The Pyrenees and perhaps the Cantabrian Mountains, at elevations of probably not less than 4,500 ft. above sea-level.

The types of the subspecies are a male from Vallée de Latour, Htes. Pyr., May 20, 1913, and a female from Pic de Gaube, Htes. Pyr., October 10, 1912, both in my collection.

The males, although some are inclined to be on the dark side, differ chiefly by their diminutive size, as the following wing-measurements show, the average length in six specimens being only 360·7 mm., which is 25·6 mm. less than in the average typical bird.

	Wing.
♂ ad. Vallée de Latour, Htes. Pyr., 2,000 m., May 20, 1913. (Ingram Coll.) .....	367 mm.
♂ ad. Sapinière de Cularus, Htes. Pyr., 1,600 m., May 1906. (Tring Museum) .....	368 mm.
♂ ad. Vallée de Latour, Htes. Pyr., May 3, 1905. (Tring Museum) .....	348 mm.
♂ ad. Ax-les-Thermes, Ariège, May 27, 1896. (British Mus.) .....	345 mm.
♂ ad. Luchon, Hte. Garonne, May 15, 1876. (Marmottan Coll.) .....	370 mm.
♂ ad. Luz, Htes. Pyr., Feb. 8, 1870. (British Mus.).....	366 mm.

(*Note.*—Dr. Bureau says that the wing of the only Pyrenean specimen in the Nantes Museum measures 385 mm., but as I have not measured this bird myself, I have purposely omitted it from the above list.)

The females are proportionally just as small as the males, but apart from this they differ appreciably in the coloration of their plumage. This is especially marked when one compares them with the more northern examples of *T. u. urogallus*, while of course it is still more emphasized when

they are placed by the side of *T. u. uralensis*. In the Pyrenean race the blackish barrings on the under surface are very distinct and connected, and the belly is never very heavily marked with white. The upper surface is inclined to be dark and rather cold in tone, having less of the warm brown tints in the ground-colour of the mottled feathers. The average wing-measurement of the five specimens examined is 278·9 mm., or 21·6 mm. less than that of the average typical bird. The details are as follows:—

	Wing.
♀ ad. Pic de Gaube, Htes. Pyr., 1,800 m., Oct. 10, 1912. (Ingram Coll.) .....	284 mm.
♀ ad. Environs of Caunteret, Htes. Pyr., 2,000 m., Nov. 8, 1906. (Tring Mus.) .....	281 mm.
♀ ad. Environs of Caunteret, 1,600 m., June 1906. (Tring Mus.) .....	277 mm.
♀ ad. Forêt de Gaube, Htes. Pyr., 1,600 m., Oct. 10, 1904. (Tring Mus.) .....	270 mm.
♀ ad. Bagnères-de-Bigorre, Htes. Pyr., Sept. 1, 1881. (Marmottan Coll.) .....	282 mm.

By way of comparison it might be interesting to state that the average wing-measurement of twenty-six males of *T. u. urogallus* from various parts of Europe is 386·3 mm. (maximum 403 mm., from Lithuania [Brit. Mus.] : minimum 374 mm., from Scotland [Brit. Mus.]). The average of a similiar number of females is 300·5 mm. (maximum 317 mm., from Novgorod, Russia [Tring Mus.] ; minimum 286 mm., from Norway [British Mus.]).

VII.—*Notes on the Bird-Life of Eastern Algeria.* By the Rev. F. C. R. JOURDAIN, M.A., M.B.O.U. *With Contributions* by H. M. WALLIS, M.B.O.U., and F. R. RATCLIFF, M.B.O.U.

THE following notes are based upon two visits paid by the writer to eastern Algeria in the spring of 1913 and of 1914. After landing at Philippeville I travelled by rail to Constantine, and thence to Biskra, breaking the journey at Ain Yagout, Bâtna, El Kantara, El Outaia, and Biskra. From